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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,755	07/05/2001	Arul A. Menezes	M61.12-0367	2551

7590 04/20/2005
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EXAMINER

AZAD, ABUL K

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,755

Applicant(s)

MENEZES ET AL.

Examiner

ABUL K. AZAD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/1/02, 1/12/04, 4/</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-34 are pending in this Office Action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 10-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. (US 5,237,502).

As per claim 1, White teaches, "a computer implemented method of translating a textual input in first language to a textual output second language", comprising:

"generating an input logical form based on the natural language input" (Fig. 1, element "natural language input" and CLF);

"selecting a set one or more of a plurality matching transfer mappings in a transfer mapping database that match at least a portion of the input logical form, based on a predetermined metric" (col. 5, line 41 to col. 6, line 3);

"combining the set of transfer mappings into a target logical form" (col. 8, lines 50-60);and

"generating the output based on the target logical form" (col. 8, lines 50-60).

White teaches a natural language input but does not explicitly teach text input. Official Notice is taken on the well-known textual natural language. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use

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text input as natural language input so that an easy translation on the natural language is obtained.

As per claim 2, White teaches, "selecting the set transfer mappings based a number input nodes covered the set of transfer mappings, collectively" (col. 8, lines 12-60).

As per claim 3, White teaches, "selecting the set transfer mappings based sizes of the plurality of matching transfer mappings" (col. 8, lines 12-60).

As per claim 10, White teaches, "generating logical form, indicative of between the input logical form and logical forms in the transfer mapping database, based on the set of transfer mappings" (col. 4, lines 13-50).

As per claim 11, White teaches, "generating a target logical form based on the linked logical form" (col. 4, lines 13-50)

As per claim 12, White teaches, "accessing a bilingual dictionary based on words the linked logical form" (col. 4, lines 38-50).

As per claim 13, White teaches, "generating the textual output based target logical form" (col. 4, lines 30-50).

As per claim 14, White teaches, "selecting as the set a plurality of overlapping, matching transfer mappings" (col. 3, line 59 to col. 4, line 12).

As per claim 15, White teaches, "combining the plurality of overlapping, matching transfer mappings to obtain the target logical form" (col. 4, lines 13-50).

As per claims 16-18 and 23-25, they are interpreted and thus rejected for the same reasons set for in the rejection of claims 1-3 and 10-15.

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As per claims 19-22 and 26-34, White does not explicitly teach plurality of transfer mapping dependency structures formed based on up to at least two hundred thousand parallel, aligned, training sentences. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a plurality of transfer mapping dependency structures formed based on up to at least two hundred thousand parallel, aligned, training sentences because the choice of the numbers of transfer mapping dependency structures formed is routine experimentation and optimization in the absence of criticality.

4. Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. (US 5,237,502) as applied to claim 1 above, and further in view of Meyers et al. (Alignment of Shared forests for Bilingual corpora).

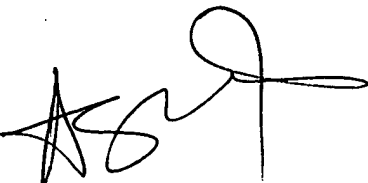
As per claims 4-9, White does not explicitly teach, selecting the set of transfer mapping as a largest or based on the frequency of matching transfer mapping. However, Meyers teaches, selecting the set of transfer mapping as a largest or based on the frequency of matching transfer mapping (section 2, our approach and section 3, Data structures). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Meyers teaching in the invention of White because one of ordinary skill in the art would readily recognized that provide a better matching for a better translation.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABUL K. AZAD whose telephone number is (571) 272-7599. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.K. 
4/17/05

ABUL K. AZAD
Primary Examiner
Art Unit 2654